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MULTIPLE NETWORK FAULT TOLERANCE VIA
REDUNDANT NETWORK CONTROL

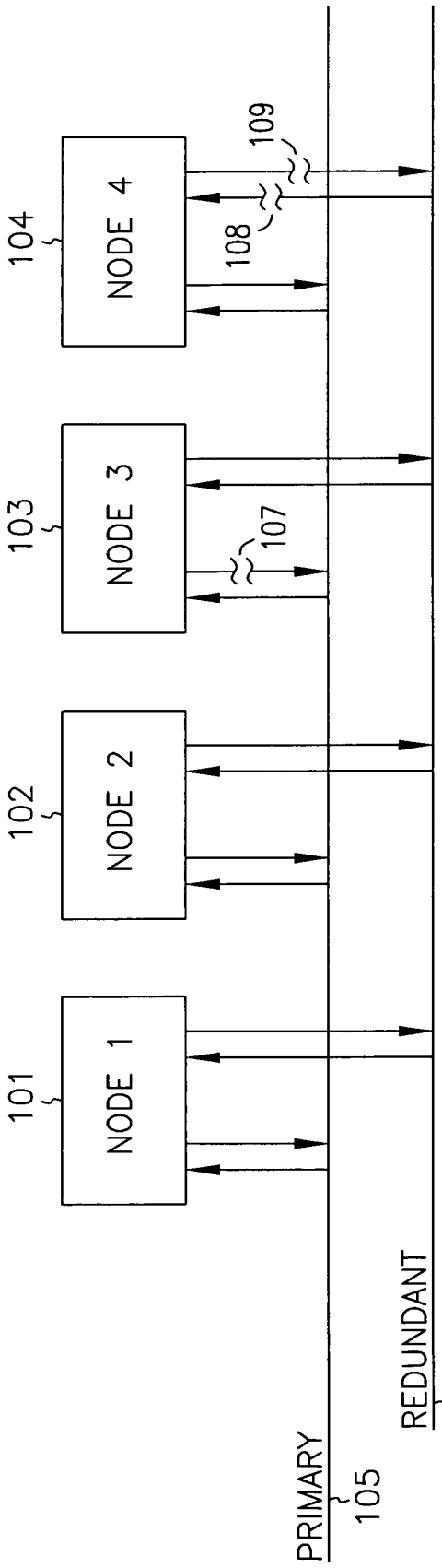

Fig.1

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NODE 3 NETWORK STATUS TABLE

RECEIVED DATA OK			OTHER NODE REPORT DATA	
NODE#	PRIMARY	REDUNDANT	NODE 3 PRIMARY	NODE 3 REDUNDANT
1	OK	OK	X	OK
2	OK	OK	X	OK
–	–	–	–	–
4	OK	X	X	X

Fig.2

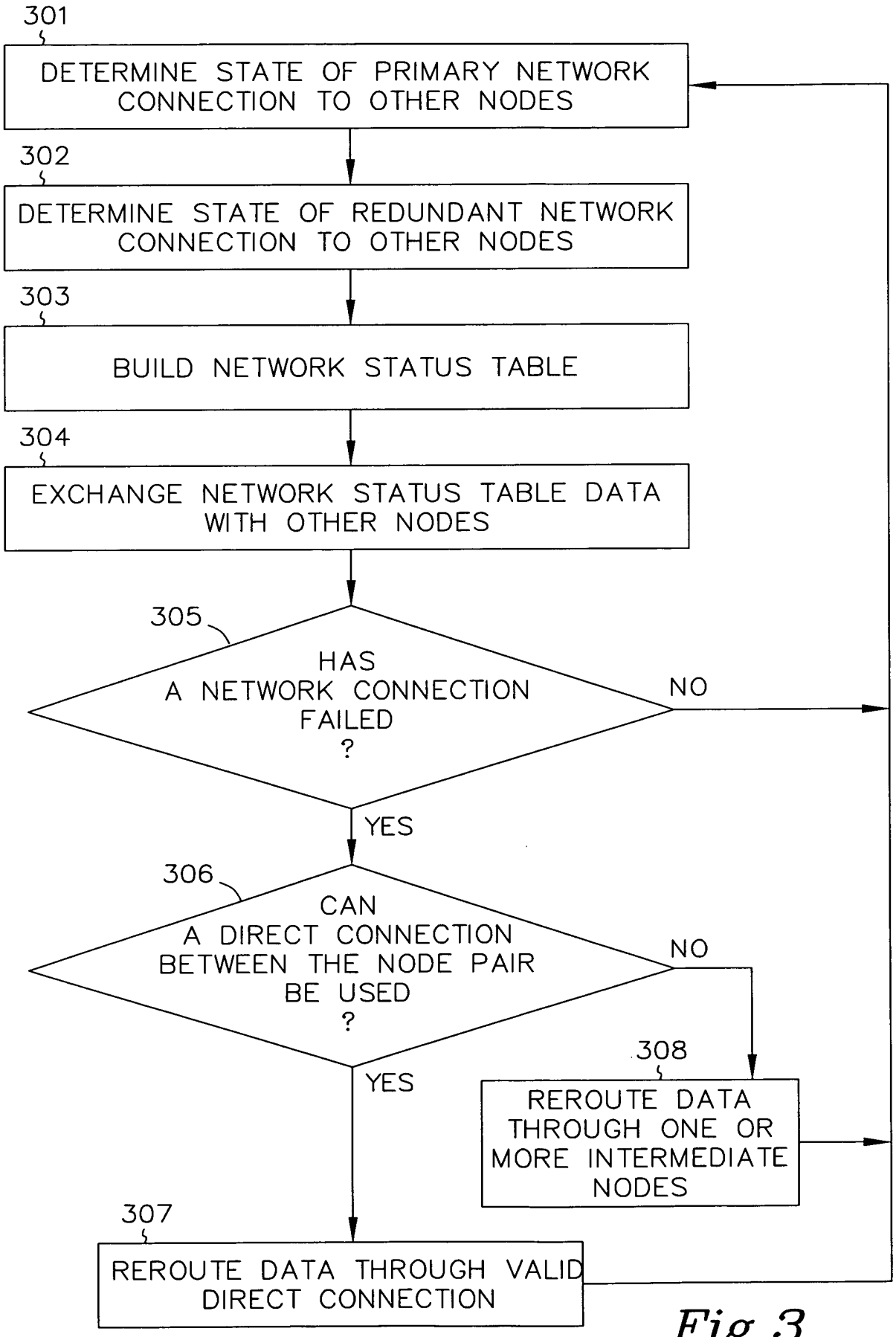
301
DETERMINE STATE OF PRIMARY NETWORK CONNECTION TO OTHER NODES
302
DETERMINE STATE OF REDUNDANT NETWORK CONNECTION TO OTHER NODES
303
BUILD NETWORK STATUS TABLE
304
EXCHANGE NETWORK STATUS TABLE DATA WITH OTHER NODES
305
HAS A NETWORK CONNECTION FAILED ?
NO
YES
306
CAN A DIRECT CONNECTION BETWEEN THE NODE PAIR BE USED ?
NO
YES
308
REROUTE DATA THROUGH ONE OR MORE INTERMEDIATE NODES
307
REROUTE DATA THROUGH VALID DIRECT CONNECTION

Fig.3